

In the claims:

Please amend the claims as follows:

1-4 Cancelled

5. (Currently Amended) The heat sink as claimed in claim ~~3-35~~, wherein the particles are connected with each other by ~~means of metal stays, for example copper stays (9), e.g. by means of copper metal stays produced through DCB bonding.~~

6-8 Cancelled

9. (Currently Amended) A heat sink as claimed in claim ~~3-35~~, wherein the capillary structure is formed from at least one ply or layer, which is applied at least on part of the inner surface of the wall sections delimiting the at least one interior space, and enclosing the posts at their respective connecting areas with these wall sections.

10. (Previously Presented) A heat sink as claimed in claim 9 wherein the layer forming the capillary structure is applied at least on a partial area of the surface of the posts.

11. (Currently Amended) A heat sink as claimed in claim ~~3-35~~, wherein the posts have a diameter that is considerably smaller in every direction of the diameter than the dimension of the interior in this direction of the diameter.

12. (Withdrawn-Currently Amended) A heat sink as

claimed in claim ~~3~~35, wherein between the vapor space and the capillary structure forming the at least one fluid channel there is an intermediate wall.

13. (Withdrawn) A heat sink as claimed in claim 12, wherein the intermediate wall is provided with a plurality of openings or is made of a perforated material.

14. (Withdrawn) A heat sink as claimed in claim 12, wherein the at least one intermediate wall is parallel to the first wall sections.

15. (Withdrawn) A heat sink as claimed in claim 12, wherein the intermediate wall is formed from a pipe section preferably from a pipe section pressed flat or formed in an oval profile.

16. (Previously Presented) A heat sink as claimed in claim 9, wherein at least two capillary structures forming a fluid channel and/or at least two vapor channels are provided for.

17. (Withdrawn-Currently Amended) A heat sink as claimed in claim ~~6~~ 35, wherein first and second wall sections are each formed from plate-shaped walls, which together with a peripheral wall delimit the interior of the heat sink.

18. (Withdrawn) A heat sink as claimed in claim 17, wherein the first wall sections are formed from areas of a

pipe section preferably pressed flat delimiting the interior of the heat sink.

19. (Withdrawn-Currently Amended) A heat sink as claimed in claim ~~4~~35, wherein the heat sink comprises several plates located one above the other in the manner of a stack and connected with each other at the surfaces, of which plates in the inside of the stack are provided with openings so that these openings form a channel structure through the interior of the heat sink and that the structured plates are supplemented by areas outside of the openings to the continuous posts, and that the material forming the capillary structure is inserted in at least one area of the channel structure.

20. (Withdrawn) A heat sink as claimed in claim 19, wherein the interior is formed by at least one depression or recess in one of the plates forming the heat sink.

21. (Withdrawn-Currently Amended) A heat sink as claimed in claim ~~6~~ 35, wherein the particles forming the capillary layer or structure are provided in one layer on the respective surface of the walls delimiting the interior.

22. (Currently Amended) A heat sink as claimed in claim ~~6~~ 35, wherein the particles are connected directly with the respective surface, ~~for example~~ by means of DCB bonding.

23. (Currently Amended) A heat sink as claimed in claim ~~6~~ 35, wherein the body of the heat sink is formed from a pipe section that is closed at both ends.

24-34 Cancelled

35. (Currently Amended) A heat sink designed as heat pipe comprising a heat pipe body, at least one interior space in the heat pipe body, said at least one interior space being closed toward the outside by walls und forming at least one vapor channel and at least one fluid channel connected to the at least one vapor channel and having a porous or capillary structure, and several spatially separated posts extending through the interior and between two opposing walls delimiting the interior space, whereby the posts and the walls are made of a metal with high heat conductivity, wherein each post is connected at both ends directly with one of the two opposing walls by means of DCB bonding, and wherein the capillary or porous structure comprises particles of ceramic material connected with each other and with an inner surface of the interior space of the heat pipe body such that the capillary or porous flow paths are formed between the particles, and wherein the particles of ceramic are connected with the interior space of the heat pipe body by DCB bonding.

36. (Currently Amended) The heat sink as claimed in claim 35, wherein the particles of ceramic material are connected with each other ~~and with the inner surface of the interior space of the heat pipe body by bonding or sintering.~~

37. (Previously Presented) The heat sink as claimed in claim 35, wherein the heat pipe body is a flat body.

38. (New) The heat sink of claim 5, wherein the particles of ceramic are connected to one another by copper stays produced through DCB bonding.